



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,819	01/17/2002	Takuya Kobayashi	2002_0037A	5356
513	7590	06/14/2006	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			CERVETTI, DAVID GARCIA	
2033 K STREET N. W.				
SUITE 800			ART UNIT	
WASHINGTON, DC 20006-1021			PAPER NUMBER	
			2136	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/046,819	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	David G. Cervetti	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed April 3, 2006, have been fully considered.
2. Claims 46-51 are pending and have been examined. Claims 1-45 and 52-58 have been cancelled.

Response to Amendment

3. Applicant's arguments with respect to claims 46-51 have been considered but are moot in view of the new ground(s) of rejection.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. **Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Fletcher et al. (US Patent 7,010,681, hereinafter Fletcher).**

Regarding claim 46, Fletcher teaches a data processor for receiving and processing data to which information for tampering detection is added (column 2, lines 30-67), said data processor comprising: a receiver operable to receive data which includes an authentication information region for including the tampering detection

information, a protected data region for including data to be subjected to tampering detection, and an unprotected data region for including data that is not to be subjected to tampering detection (column 3, lines 40-67, column 4, lines 1-37); a protected data authentication unit operable to detect, for the data, which is included in the protected data region and received by said receiver, whether the data included in the protected data region has been tampered with by using the tampering detection information included in the authentication information region (column 4, lines 38-67, column 5, lines 1-67); and an unprotected data authentication unit operable to determine the data included in the unprotected data region as being valid when a data type of the data, which is included in the unprotected data region and received by said receiver (column 5, lines 1-67). Fletcher does not use a list to list by type the data included in the unprotected data region. However, Fletcher teaches labeling the data to provide security services and already lists the data by data type. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a list of the data included in the unprotected data region. One of ordinary skill in the art would have been motivated do so to help provide data integrity services.

Regarding claim 48, Fletcher teaches a data processor structured by a transmitting data processor and a receiving data processor (column 2, lines 30-67), said transmitting data processor being operable to transfer, to said receiving data processor, data to which information for tampering detection is added (column 3, lines 40-67, column 4, lines 1-37), wherein said transmitting data processor comprises: a data generation unit operable to generate data to be transmitted by arranging data to be

Art Unit: 2136

subjected to tampering detection, the data that is not to be subjected to tampering detection in an unprotected data region, and the tampering detection information derived based on the data in the protected data region in an authentication information region (column 3, lines 40-67, column 4, lines 1-37); and a transmitter operable to transmit the data generated by said data generation unit (column 6, lines 1-50); and wherein said receiving data processor comprises: a receiver operable to receive the data transmitted from said transmitting data processor; a protected data authentication unit operable to detect, for the data, which is included in the protected data region and received by said receiver, whether the data in the protected data region has been tampered by using the tampering detection information in the authentication information region (column 4, lines 38-67, column 5, lines 1-67); and an unprotected data authentication unit operable to determine the data included in the unprotected data region as being valid when a data type of the data, which is included in the unprotected data region and received by said receiver (column 5, lines 1-67). Fletcher does not use a list to list by type the data included in the unprotected data region. However, Fletcher teaches labeling the data to provide security services and already lists the data by data type. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a list of the data included in the unprotected data region. One of ordinary skill in the art would have been motivated do so to help provide data integrity services.

Regarding claim 50, Fletcher teaches a data processing method for receiving and processing data to which information for tampering detection is added (column 2,

Art Unit: 2136

lines 30-67), said method comprising: receiving data which includes an authentication information region for including the tampering detection information, a protected data region for including data to be subjected to tampering detection (column 3, lines 40-67, column 4, lines 1-37), and an unprotected data region for including data that is not to be subjected to tampering detection (column 3, lines 40-67, column 4, lines 1-37); detecting, for the data, which is included in the protected data region and received in said receiving of the data, whether the data included in the protected data region has been tampered with by using the tampering detection information included in the authentication information region (column 4, lines 38-67, column 5, lines 1-67); and determining the data included in the unprotected data region as being valid when a data type of the data, which is included in the unprotected data region and received in said receiving of the data (column 4, lines 38-67, column 5, lines 1-67). Fletcher does not use a list to list by type the data included in the unprotected data region. However, Fletcher teaches labeling the data to provide security services and already lists the data by data type. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a list of the data included in the unprotected data region. One of ordinary skill in the art would have been motivated do so to help provide data integrity services.

Regarding claim 51, Fletcher teaches a data processing method for transferring data, to which information for tampering detection is added, from a transmitting data processor to a receiving data processor (column 2, lines 30-67), wherein: in the transmitting data processor, said method comprises generating data to be transmitted

by arranging data to be subjected to tampering detection in a protected data region, the data that is not to be subjected to tampering detection in an unprotected data region, and the tampering detection information derived based on the data in the protected data region in an authentication information region (column 3, lines 40-67, column 4, lines 1-37), and transmitting the data generated in said generating of the data to be transmitted (column 6, lines 1-50); and in the receiving data processor, said method comprises receiving the data transmitted from the transmitting data processor (column 6, lines 1-50), detecting, for the data, which is included in the protected data region and received in said receiving of the data, whether the data in the protected data region has been tampered with by using the tampering detection information in the authentication information region (column 4, lines 38-67, column 5, lines 1-67), and determining the data included in the unprotected data region as being valid when a data type of the data, which is included in the unprotected data region and received in said receiving of the data (column 5, lines 1-67). Fletcher does not use a list to list by type the data included in the unprotected data region. However, Fletcher teaches labeling the data to provide security services and already lists the data by data type. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a list of the data included in the unprotected data region. One of ordinary skill in the art would have been motivated do so to help provide data integrity services.

Regarding claims 47 and 49, Fletcher teaches the data received / generated by said receiver / data generation unit is hypertext data (fig 1-2, column 3, lines 40-67,

column 4, lines 1-37). Fletcher does not expressly teach the unprotected list lists, by type, a tag included in the unprotected data region but includes such tags (fig 1-2, column 3, lines 40-67, column 4, lines 1-37).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cofta (US Patent Application Publication 2001/0016042) discloses loading program modules in a terminal using digital signatures and encryption. Shear (US Patent 6,157,721) discloses a verifying authority digitally signs a load module or other executable with several different digital signatures and/or signature schemes, a protected processing environment or other secure execution space may require a load module or other executable to present multiple digital signatures before accepting it. An attacker would have to "break" each (all) of the several digital signatures and/or signature schemes to create an unauthorized load module or other executable that would be accepted by the protected processing environment or other secure execution space. Different protected processing environments (secure execution spaces) might examine different subsets of the multiple digital signatures--so that compromising one protected processing environment (secure execution space) will not compromise all of them. As an optimization, a protected processing environment or other secure execution space might verify only one of the several digital signatures (for example, chosen at random each time an executable is used)--thereby speeding up the digital signature verification while still maintaining a high degree of security (column 6, lines 1-67, column 7, lines 1-67). Atkinson (US Patent Number 5,892,904) discloses a

Art Unit: 2136

certification or signing method that ensures the authenticity and integrity of a computer program.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David G. Cervetti whose telephone number is (571) 272-5861. The examiner can normally be reached on Monday-Friday 7:00 am - 5:00 pm, off on Wednesday.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DGC

Handwritten signature of David G. Cervetti, dated 06/18/01.